

AMENDMENT

In the Claims:

Please replace the presently pending claims with the following claims:

1. (Thrice amended) A process for the production of a β -lactam, comprising the steps of:

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- a) fermenting on a volume scale of at least 10 m³, a microbial strain that produces a β -lactam in a fermentation medium which contains only chemically defined components as carbon and nitrogen sources and contains no complex raw materials, and
 - b) recovering the β -lactam from the fermentation medium.

2. The process of claim 1, wherein the chemically defined medium further contains an amount of a ~~complex~~ carbon and/or nitrogen source which is less than 10% of the total C and/or N in the medium.

3. The process of claim 1, wherein the chemically defined components comprise a carbon source selected from the group consisting of glucose, lactose, fructose, sucrose, a maltodextrin, starch inulin, glycerol, a vegetable oil, a hydrocarbon, an alcohol, an organic acid, and/or a nitrogen source selected from the group consisting of urea, ammonia, nitrate, an ammonium salt and an amino acid.

✓ 4. The process of claim 3, wherein the carbon source is glucose and the nitrogen source is ammonia and/or an ammonium salt.

5. The process of claim 1, wherein said fermenting is via a batch, a repeated batch, a fed-batch, a repeated fed-batch or a continuous fermentation process.

6. The process of claim 5, wherein fermenting is via a fed-batch process.

7. The process of claim 6, wherein a carbon and/or a nitrogen source is fed to the process.

✓ 8. The process of claim 7, wherein the carbon source is glucose and the nitrogen source is ammonia and/or an ammonium salt.

15. The process of claim 1, wherein the microbial strain is a filamentous microbial strain.

16. The process of claim 15, wherein the filamentous strain is a fungus.

19. The process of claim 16, wherein the fungus is a *Penicillium* strain.

20. The process of claim 19, wherein the fungus is *Penicillium chrysogenum*.

36. The process of claim 19 wherein the β -lactam is penicillin V.

37. The method of claim 19 wherein the β -lactam is adipoyl-7-ADCA.